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Centers for Disease Control and Prevention
National Center for Infectious Diseases
Select Agent Transfer Program
1600 Clifton Road NE., Mailstop E-79
Atlanta GA 30333

RE: Interim Final Rule for Possession, Use, and Transfer of Select Agents

Dear Colleagues:

I wish to submit the following comments on the Interim Final Rule for Possession, Use, and Transfer of Select Agents:

73.4, paragraph e (select agents--genetic elements, recombinant nucleic acids, and recombinant organisms)

In section (1), the following text should be inserted: "or a nucleic acid (synthetic or naturally derived) comprising at least 15% of the genome of a select agent." [Current molecular-biology technology permits reconstitution, in a single, simple reaction, of a genome from two to five sub-genomic nucleic-acid segments. Use of a 15%-of-genome threshold eliminates complications posed by the 100-nucleotide threshold proposed in the Notice, eliminates complications posed by the phrase "contiguous or fragmented" in the Interim Final Rule (which could be construed as including microarrays), and permits inclusion of a critical class of agents omitted by the Interim Final Rule.]

In section (1), "viral" should be deleted, and "select agent viruses" should be replaced by "select agents. [Current molecular-biology technology permits cloning of bacterial genomes and reconstitution of bacterial cells (e.g., recently reported experiments involving cloning of the genome of the bacterial pathogen *Mycoplasma genitalum*). Deletion of "viral" and "viruses" permits inclusion of a critical class of agents omitted by the Interim Final Rule.]

In section (2), subsections (i), (ii), and (iii) should be deleted. [Current molecular-biology techniques permit reconstitution, in a single, simple step, of expressible, vector-borne or chromosome-borne nucleic acids from non-expressible, non vector-borne, non-chromosome-borne nucleic acids (e.g., restriction fragments, PCR products, or synthetic products). Deletion of subsections (i), (ii), and (iii) permits inclusion of a critical class of agents omitted by the Interim Final Rule.]

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73.4, paragraph f (select agents--exclusions)

Criteria for exemption of attenuated strains of select agents should be specified, or, alternatively, the provision for exemption of attenuated strains outside periodic reviews should be deleted. [The criterion in the Interim Final Rule--"that they do not pose a severe threat to the public health"--is insufficiently specific.]

73.5, paragraph e (overlap select agents--genetic elements, recombinant nucleic acids, and recombinant organisms)

See comments for 73.4, paragraph e.

73.5, paragraph f (overlap select agents--exclusions)

See comments for 73.4, paragraph f.

73.10, paragraph a (safety--BMBL and NIH guidelines)

The recommendations in the CDC/NIH publication "Biosafety in Microbiological and Biomedical Laboratories," including appendices (BMBL), and in the "NIH Guidelines for Research Involving Recombinant DNA Molecules" (NIH Guidelines) should be made mandatory for all entities subject to the rule.

73.10, paragraph d (safety--additional experiments that warrant stringent scrutiny)

The following additional experiments warrant stringent scrutiny:

(1) Experiments involving construction of vaccine-resistant select agents or toxins.

(2) Experiments involving increasing the environmental stability of select agents or toxins.

(3) Experiments involving powder or aerosol production of select agents or toxins (other than preparation of lyophilized reference specimen <10 mg).

(4) Experiments involving powder or aerosol dispersal of select agents or toxins.

73.11, paragraph d (security--access control)

Minimum requirements for access control and monitoring should be specified--not left to the discretion of the entity ("as needed"). A minimum of three levels of access control should be required (e.g., access to building, access to wing of building, access to laboratory). At least two levels of access control should be monitored by video surveillance, and, preferably, at least one level of access control should be monitored by security personnel.

I appreciate the opportunity to comment on the Interim Final Rule. Thank you in advance for your attention.

Sincerely,

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